

REMARKS

The Office Action dated March 9, 2009 has been received and carefully studied.

A Request for Continued Examination (RCE) is filed herewith.

The Examiner newly rejects claims 7-13 and 15-20 under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as being obvious over, JP 2003-307623A. The Examiner states that JP '623 teaches a polarizing plate having excellent moisture and heat resistance by forming an adhesive layer having excellent waterproof property between a polyvinyl alcohol polarizing film and a cellulose acetate protective film; that a fixing process is used in producing the PVA polarizing film to strengthen the adsorption of the color of the film, by adding boric acid and/or boron to the treatment bath; that the polarizing plate is produced by bonding the cellulose acetate protective film to at least one side of the PVA polarizing film with a water-based adhesive comprising a PVA polymer (which can be a modified PVA), an inorganic layered compound, and a crosslinking agent (such as an epoxy compound); and that copolymerization with an alpha olefin can be carried out. The Examiner states that although she considers that a resin having a maleic anhydride skeleton is disclosed and envisaged by JP '623,

the selection of any of the co-monomers taught by JP '623 also would have been obvious.

The Examiner also newly rejects claims 7-13 and 15-20 under 35 U.S.C. §103(a) as being unpatentable over JP 2003-307623A in view of EP '136. The Examiner admits that JP '623 does not expressly disclose an adhesive composition comprising a PVA resin and a separate, different resin comprising isobutylene/maleic anhydride copolymer, but cites EP '136 for its teaching of incorporating a water-insoluble and alkali-soluble/swellable resin such as a copolymer of isobutylene with maleic anhydride, into a water-based PVA adhesive composition to improve water resistance.

The Examiner also newly rejects claim 14 under 35 U.S. C. §103(a) as being unpatentable over JP 2003-307623A in view of Suda et al., JP 2005-0497791 or Tanaka et al., U.S. Patent No. 6,905,640 or admitted prior art. The Examiner considers the particular amount of boric acid used to be a result-effective variable.

By the accompanying amendment, claim 7 has been amended to recite that the water-based adhesive for polarizing elements consists essentially of a polyvinyl alcohol resin, a resin having a maleic anhydride skeleton in the structure, and a crosslinking agent, wherein the resin having a maleic anhydride skeleton in

the structure is a copolymer of maleic anhydride and isobutylene. Claim 15 has been similarly amended, and claims 8 and 16 have been cancelled. The dependency of claims 9 and 17 has been amended accordingly.

The most characteristic feature of the present invention as now claimed resides in the use of a water-based adhesive consisting essentially of a polyvinyl alcohol resin, a resin having a maleic anhydride skeleton in the structure which is a copolymer of maleic anhydride and isobutylene, and a crosslinking agent, for bonding a protective film to a polarizing element.

Test Example 1 of the present specification demonstrates in Table 1 that the polarizers using the water-based adhesive for the polarizing element as recited in amended claims 7 and 15 were superior in durability when dipped in warm water at 60°C for 120 hours, irrespective of the content of the boron compound in the polarizing element calculated in terms of boric acid.

Test Example 2 demonstrates in Table 2 that the polarizers made using the water-based adhesive for the polarizing element as recited in amended claims 7 and 15 were superior in a water resistance test in warm water at 60°C and in a moisture resistance test in an environment of 60°C and 100% RH.

Furthermore, Test Example 3 demonstrates in Table 3 that the polarizers made using the water-based adhesive for the polarizing

element as recited in amended claims 7 and 15 also were superior in adhesion in the outer peripheral portion of the polarizer.

Isozaki et al. (JP 2003-307623 A) teach use of a layer of water-based adhesive wherein the adhesive composition comprises a polyvinylalcohol polarizing element, an inorganic layered compound, and a crosslinking agent. That is, the adhesive composition used in Isozaki et al. must contain an inorganic layered compound as the essential element for the composition.

Accordingly, the present invention as now claimed is fundamentally different from that of Isozaki et al. in that the claimed invention uses the water-based adhesive containing no inorganic layered compound, whereas Isozaki et al. use the adhesive composition containing an inorganic layered compound as the essential element. That is, the transitional phrase "consisting essentially of" limits the scope of the claim to the specified materials or steps and those that do not materially affect the basic and novel characteristics of the claimed invention. *In re Herz*, 190 USPQ 461, 463 (CCPA 1976). It is clear from the instant specification that the basic and novel characteristics of the present invention, namely, a polarizer comprising a polarizing element and a protective film bonded to the polarizing element with an adhesive, wherein the adhesive consists essentially of a PVA resin, a resin having a maleic

anhydride skeleton in the structure and a crosslinking agent, that has the advantageous effects shown in Test Examples 1 to 3, are achieved without the inorganic layered compound of Isozaki et al. Adding an inorganic layered compound to the present water-based adhesive would materially change the characteristics of the adhesive.

In addition, the water-based adhesive of the claimed invention contains the resin having a maleic anhydride skeleton in the structure which is a copolymer of maleic anhydride and isobutylene. Isozaki et al. do not specifically teach or suggest the use of the copolymer of maleic anhydride and isobutylene.

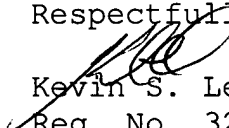
According to the claimed inventions characterized by the use of the water-based adhesive as stated above, the advantageous effect can be attained as demonstrated in Test Examples 1 to 3 of the present specification. That is, the claimed invention can attain the advantageous effects that the water-based adhesive for polarizing element exerts particularly excellent effect on adhesive between the polarizing element and the protective film even when the content of the boron compound in the polarizing element is increased to about 25-40% by weight in terms of boric acid over the content of about 13-25% by weight which is generally employed in conventional polarizing

elements. Isozaki et al. neither teach nor suggest the
advantageous effects as attained in the claimed invention.

The secondary references do not supply the deficiencies of
Isozaki et al.

Reconsideration and allowance are respectfully requested in
view of the foregoing.

Respectfully submitted,


Kevin S. Lemack

✓ Reg. No. 32,579

176 E. Main Street - Suite 5

Westboro, Massachusetts 01581

TEL: (508) 898-1818